

What is claimed is:

1. A method of mapping color space with chromatic formulations,
5 comprising the steps of:
 - (a) selecting a limited number of chromatics for use with a bulk material
using selection criteria;
 - (b) formulating the selected chromatics with white or black in the bulk
material to generate a plurality of chromatic formulations, wherein such
10 plurality of chromatic formulations populate a desirable volume of color space;
and
 - (c) computing additional chromatic formulations using algorithms
reflecting the contributions of chromatics, white, and black to color, and
incremental substitutions thereof.
- 15 2. The method of Claim 1, wherein the algorithms comprise:
 - (i) predictions based on variation of black with white;
 - (ii) predictions based on variation of two different chromatics
with white;
 - 20 (iii) predictions based on variation of both black and chromatic
with white; and
 - (iv) predictions based on variation of two different chromatics
with white.
- 25 3. The method of Claim 2, optionally including
 - (d) generating a database of chromatic formulations containing
chromatic formulations for generated nodes, chromatic formulations for
computed nodes, or both.

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4. The method of Claim 3, optionally including
(e) matching spectral data curves from an actual or virtual object with
one or more of the chromatic formulations stored in the database.

5 5. The method of Claim 4, optionally including
(f) communicating the results of spectral data curve matching to a
person seeking to match color for the actual or virtual object, wherein the results
comprises one or more choices.

10 6. The method of Claim 5, optionally including
(g) receiving an instruction by a person to whom the results were
communicated in step (f) as to which choice of color match, if any, is selected.

7. The method of Claim 6, optionally including
15 (h) ordering the chromatic formulation correlated to the color match
selected in step (g) to be prepared for use with a bulk material.

8. The method of Claim 7, optionally including
(i) mixing the selected chromatic formulation with another material
20 compatible with the bulk material for use with the bulk material to provide color
for the bulk material.

9. A chromatic formulation computed according to the method of
any of Claims 1-8.

25 10. A method of predicting chromatic formulations in color space for
a bulk material, comprising the steps of:
(1) selecting chromatic formulations via empirical evidence to create
generated nodes in color space, and

(2) applying algorithms derived from such generated nodes to create computed nodes of chromatic formulations in color space, wherein the algorithms comprise:

(i) predictions based on variation of black with white;

5 (ii) predictions based on variation of two different chromatics with white;

(iii) predictions based on variation of both black and chromatic with white; and

10 (iv) predictions based on variation of two different chromatics with white.

11. The method of Claim 10, wherein the predictions of step (2) result in actual chromatic formulations with virtual color space spectral data curves.

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12. A computed node of a chromatic formulation in color space made according to the method of either of Claims 10 or 11.

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